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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,394	06/19/2001	Paul S. Levy	42390.P11014	3953

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EXAMINER

VAUGHN JR, WILLIAM C

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,394

Applicant(s)

LEVY ET AL.

Examiner

William C. Vaughn, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2002.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4, 7-10 and 13-22 is/are rejected.
7) ☒ Claim(s) 5, 6, 11, 12, 23 and 24 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date J 01/31/02
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. This Action is in regards to the most recent papers received on 31 October 2002.

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement submitted on 04 November 2002, have been considered by the examiner (see attached PTO-1449).

Specification

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.
- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

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- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention. **It is requested that Applicant include a Brief Summary of the Invention.**
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has

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entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Rejections - 35 USC § 101(Intangible embodiments)

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 13-18** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13-18 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 12, lines 4-6, the medium is not limited to tangible embodiments, instead being defined as including intangible embodiments (e.g., computer data signal embodied in a carrier wave). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-4, 7-10 and 13-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook, U.S. Patent No. 5,436,897 in view of Keeth et al. (Keeth), U.S. Patent No. 6,374,360.

7. Regarding **claim 1**, Cook discloses the invention substantially as claimed. Cook discloses *a network, comprising: at least one transmitting device and at least one receiving device* [see Cook, Col. 2, lines 5-32]; *and a bus coupled to between the devices to exchange frames* [see Cook, Col. 2, lines 5-32, Col. 3 lines 5-14 and Col. 43-45], *wherein each frame includes a data structure* [see Cook, Figure 3A, Col. 5, lines 8-30]. However, Cook does not explicitly disclose wherein each frame includes at least one control structure, a clock structure and wherein a rising edge of each frame indicates the clock structure and a falling edge of each frame indicates that a structure that follows the falling edge of the frame is the data structure or the command structure, and wherein any receiving device in a set of devices is coupled to use a clock structure to adjust each phase of one or more of the frames to synchronize the frames with each other.

8. In the same field of endeavor, Keeth discloses (e.g., synchronization circuit). Keeth discloses *wherein each frame includes at least one control structure, a clock structure and wherein a rising edge of each frame indicates the clock structure and a falling edge of each frame indicates that a structure that follows the falling edge of the frame is the data structure or the command structure, and wherein any receiving device in a set of devices is coupled to use a clock structure to adjust each phase of one or more of the frames to synchronize the frames with each other* [see Keeth, Col. 15, lines 23-34].

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9. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Keeth's teachings of a synchronization circuit with the teachings of Cook, for the purpose of providing a more efficient way of signals of packets at high data transfer rates [see Keeth, Col. 7, lines 1-7]. Cook provides motivation by stating that there exist a need to provide an improved method for transmitting data to increased transmission rates for applications for motorized vehicles [see Cook, Col. 1, lines 66-67, Col. 2, lines 1-2]. By this rationale **claim 1** is rejected.

10. Regarding **claim 2**, Cook-Keeth discloses *wherein the data structure comprises a predetermined number of encoded data field bits* [see Cook, Col. 2, lines 32-34]. By this rationale **claim 2** is rejected.

11. Regarding **claim 3**, Cook-Keeth discloses *wherein the command structure comprises a predetermined number of encoded command/control field bits* [see Keeth, Figure 6]. By this rationale **claim 3** is rejected.

12. Regarding **claim 4**, Cook-Keeth discloses *wherein the falling edge of the frame occurring at one predetermined point in the control structure indicates a first command and the falling edge of the frame occurring at a second predetermined point in the control structure indicates a secondary set of commands* [see Keeth, Figure 6, Col. 14, lines 29-67, Col. 15, lines 1-34]. By this rationale **claim 4** is rejected.

13. **Claims 7-10** list all the same elements of claims 1-4, but in method form rather than network form. Therefore, the supporting rationale of the rejection to claims 1-4 applies equally as well to claims 7-10.

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14. **Claims 13-18** list all the same elements of claims 1-4, but in computer data signal form rather than network form. Therefore, the supporting rationale of the rejection to claims 1-4 applies equally as well to claims 13-18.

15. Regarding **claims 19-22**, the limitation of this claim is substantially the same as that of claims 1-4, and thus is rejected for the same rationale in rejecting claims 1-4 above.

Allowable Subject Matter

16. Claims 5, 6, 11, 12, 23 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

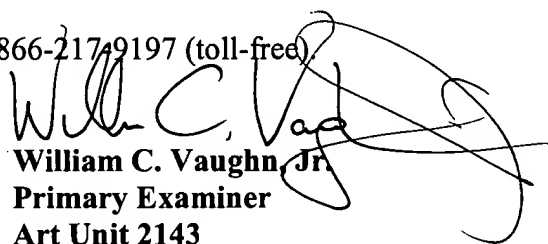
Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Vaughn, Jr. whose telephone number is (571) 272-3922. The examiner can normally be reached on 8:00-6:00, 1st and 2nd Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William C. Vaughn, Jr.
Primary Examiner
Art Unit 2143

WCV